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## LETTER TO EDITOR

# Invasive Candidiasis / Candidaemia in Aquired Immunodeficiency Syndrome (AIDS) – A Pilot Study.

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AIDS patients are invariably immunocompromised and are susceptible to opportunistic infections and since invasive candidiasis / candidemia is an underrecognised infection in India [1], we attempted to study the risk factors for the development of this infection in AIDS patients in a tertiary care hospital in southern India.

AIDS patients who reported between February 2006 to July 2006, were included in the study after obtaining informed consent from them, with assured confidentiality. Comorbid conditions and drug treatments which were taken were noted. The sources of fungal culture were blood and ascitic fluid. The identification of Candida was done at SRL-Ranbaxy, Mumbai. Of the patients who did not develop invasive candidiasis / candidaemia, 15 were randomly chosen for comparison by statistical analysis.

According to previous reports, the risk factors associated with the development of candidiasis were exploratory laprotomy, oral broad spectrum antibiotics, immunocompromised states, ICU admissions, indwelling catheters and mechanical ventilation [2],[3]. However, these studies did not have a control group of AIDS patients who did not develop invasive candidiasis / candidaemia.

We screened AIDS patients who were exposed to the known risk factors and were critically ill with thesigns and symptoms of septicaemia. In the specified time interval, there were 5 AIDS patients with invasive candidiasis / candidaemia. When compared to the 15 AIDS patients who did not develop invasive candidiasis / candidaemia, these patients had a median CD4 count of 50 ($z = 2.187$, $P = 0.029$ Mann Whitney U test), whereas the median CD4 count of the randomly chosen 15 controls was 200 (Mann Whitney U test).

Diabetes (Fishers test P=0.718), exploratory laprotomy (P= 0.518), intestinal obstruction, antibiotics (both oral and intravenous), indwelling catheters, Nonhodgkin's lymphoma and intensive care unit admissions (P= 1 Mann Whitney U test) were not statistically significant between the two groups.

The present study in AIDS patients suggests that only if a person with low CD 4 count is exposed to the known risk factors, he is susceptible for the development of invasive candidiasis / candidaemia . However, further studies with greater number of patients, with the predominant risk factor for the development of invasive candidiasis / candidaemia in AIDS patients is needed.

## Conclusion

The present study in AIDS patients suggests that if a person with low CD 4 count is exposed to the known risk factors, he is susceptible for the development of invasive candidiasis / candidaemia. For AIDS patients with low CD4 counts and those not responding to treatment, a differential diagnosis of invasive candidiasis / candidaemia should be considered and systemic antifungal treatment must be started promptly. It is however advisable to not expose severely ill AIDS patients with low CD4 counts to the known risk factors.

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